

AZBUKINA, Z.M.

Rust fungi attacking gramineous plants in the Maritime Territory.
Trudy DVFAN SSSR. Ser. bot. 5:3-77 '62.

(MIRA 17:12)

VASIL'YOVA, L.N.; AZBUKINA, Z.M.

Development of mycology and phytopathology in the Far East.
Trudy VIZR no.23:259-264 '64. (MIRA 19:2)

AZELITSKIY, R. D.

"Effect of Alkali-Containing Raw Material on the Structural Formation of a Clinker and Its Properties." Sub 24 Dec 51, Moscow Order of the Lenin Chemicotechnological Institute D. I. Mendeleev.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

AZELITSKAYA, R. D.

Effects of alkalis on composition and properties of cement clinkers. R. D. Azelitskaya. *Tekhn. 19, No. 3, 10-13(1955); Zhurnal. 5, 12(1954)* - K_2O introduced by feldspar, was studied in exell. raw mixes. burned at 1450° ; the content of free CaO in the resulting clinker is evidently increased, the C_3S content decreases. The K_2O is observed in the compd. $K_2O \cdot 3(CaO) \cdot 2SiO_2$ in the micro-

scope constitution of the clinker, characterized by its unusual appearance. If CaF_2 or $CaCl_2$ in 0.5 to 1.0% additions are introduced into the raw mixes the R_2O is chiefly volatilized, and the quality of the portland cement clinker is essentially improved and normalized. K_2O -containing portland cements always require increased H_2O additions to mortar and concrete mixes, the setting times are reduced, and

the mech. strength lowered. The C_3S contents are usually normal; only in clinkers from $CaCl_2$ -cont. raw mixes it may appear to be reduced. W. F. H. d.

ASELITSKAYA, R.D.; GRACH'YAN, A.N.; MATSOBIN, V.I.; PONOMAREV, I.P.;
PRIKHOLCHENKO, N.A.; KHRIPKOVA, G.A.

"Handbook on the technology of binding materials." IU.M.Butt.
Reviewed by R.D.Aselitskaia and others. TSement 20 no.5:32-33 S-0
'54. (MLBA 7:11)

1. Kafedra tekhnologii tsementa Novocherkasskogo politekhnicheskogo
instituta im. S.Ordshonikidze.
(Building materials)

АЗЕЛИТСКАЯ, Р. Д.

AID P - 3920

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 3/19

Author : Azelitskaya, R. D.

Title : Effect of alkali metal oxides on the mineral formation in cement clinkers.

Periodical : Zhur. prikl. khim. 28, 10, 1049-54, 1955

Abstract : Lithium oxide is the most active oxide for decreasing the temperature of the formation of the liquid phase, and thus the temperature of caking. According to their effect on the structure formation of clinkers, the oxides may be arranged in the following order: Li_2O - Na_2O - K_2O . Three tables, 1 photo, 3 references, all Russian (1949-52).

Institution : Chair of Cement Technology of the Novocherkassk Polytechnic Institute.

Submitted : Ja 3, 1954

1517-71715
PONOMAREV, I.F., prof., doktor khim. nauk; AZELITSKAYA, R.D., kand. tekhn.
nauk; GUDAKOVA, M.M., inzh.

Replacement of asbestos by slag wool in the manufacturing of asbestos
cement products. Trudy NPI 27:143-145 '56. (MIRA 10:12)

1. Kafedra tekhnologii tsementa Novocherkasskogo politekhnicheskogo
instituta.

(Asbestos cement) (Mineral wool)

Azelitskaya, R. D.

AZELITSKAYA, R.D., dots., kand. tekhn. nauk; ZHURNOVSKAYA, N.V., insh.

Effect of alkalies (K_2CO_3 , Na_2CO_3 , and $LiCo_3$) on some properties of cement. Trudy NPI 27:147-150 1956. (MIRA 10:12)

1. Kafedra tekhnologii tsementa Novosheerkasskogo politekhnicheskogo instituta.

(Alkalies) (Cement)

AFELITSKAYA, R. D.

15
Bonding characteristics of γ -CaO-SiO₂ P. P. BRYUKANOV
and R. D. AFELITSKAYA. Dokl. Akad. Nauk S.S.S.R., 108
[3] 515-17 (1966). The pure product γ -CaO possesses bonding
characteristics somewhat greater than those of β -CaO. In γ -
CaO and in β -CaO the same process of hydration takes place upon
mixing with water. The addition of β -CaO lowers the strength
of γ -CaO. The presence of certain admixtures in the original raw
materials (in particular sesquioxides) during the preparation of
 γ -CaO lowers its strength. 4 figures, 8 references. B. Z. X.

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AZELETSKYA, P. D.

7
Hydraulic properties of γ -CaSiO₃. P. P. Indnikov and
R. D. Azel'skaya. *Proc. Acad. Sci. U.S.S.R., Ser.*
Chem. 198, 57-4(1956)(English translation). Ser.
Chim. 50, 17373. R. M. R.

2
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ATT

HEBELITSKAYA, R. D.

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5286

Author: Budnikov, P. P., Azelitskaya, R. D.

Institution: Academy of Sciences USSR

Title: Binding Properties of Gamma- $2\text{CaO} \cdot \text{SiO}_2$

Original

Publication: Dokl. AN SSSR, 1956, 108, No 3, 515-517

Abstract: The beta- and gamma-form of C_2S were synthesized and their binding properties were studied by testing the compression strength of samples from a solution of 1:2 composition; gamma- C_2S has somewhat better binding properties than beta- C_2S . Addition of beta- C_2S to gamma- C_2S decreases the strength of the latter. Minimum strength is observed with a gamma- C_2S :beta- C_2S ratio of 1:1. The presence of some admixtures in the raw materials, in particular of sesquioxides, has a detrimental effect on strength of the synthesized gamma- C_2S .

Card 1/1

TITLE:

21-4-13/24
Effect of Small Additions of Carbonates of Alkaline and Alkaline-Earth Metals on some Properties of Cement Solutions (Vplyv malykh dobavok karbonativ luzhnykh i luzhnozemel'nykh metaliv na deyaki vlastyvosti tsementnoho rozchynu)

According to the efficiency of interaction, the cations may be arranged in the following order:

$\text{Li} \leftarrow \text{Na} \leftarrow \text{K} \leftarrow \text{Mg} \rightarrow \text{Ca} \rightarrow \text{Sr} \rightarrow \text{Ba}$

(arrows indicating the direction of increasing efficiency).

Carbonates of alkaline metals in amounts of 0.5 % accelerate strongly the initial setting of cement, but carbonates of alkaline-earth metals (0.1 to 0.5%) retard the initial setting, retardation increasing from Mg to Ba. The final setting is reduced.

The article contains 2 graphs and 3 tables.
There are 3 references all Slavic.

INSTITUTION: Not indicated

PRESENTED BY:

SUBMITTED: 26 November 1956

AVAILABLE: At the Library of Congress

Card 2/2

AZELITSKAYA, R.D., kandidat tekhnicheskikh nauk.; GAYDZHUROV, P.P., inzhener.

Increasing the efficiency of wet grinding of cement clinker.
Bul. stroi. tekhn. 14 no.3:12-15 Mr '57. (MLRA 10:5)

1. Novocherkasskiy politekhnicheskiy institut.
(Cement)

Azelitskaya, R.D.

101-58-2-3/8

AUTHOR: Budnikov, P.P.; Shotenberg, S.M.; Azelitskaya, R.D.

TITLE: A Thermographic Method of Determining the Hydration Heat of Cement (Termograficheskiy metod opredeleniya toploty gidratatsii tsementa)

PERIODICAL: Tsement, 1958, Nr 2, pp 15-18 (USSR)

ABSTRACT: To measure the heat originating from the hydration of cement, the authors describe a thermographic method which they developed by using a Kurnakov pyrometer with two test tubes. One of the tubes contains a standard cement mixture, the other is filled with a cement sample to be hydrated. The test tubes are linked together by a differential thermocouple in a Dewar flask (Figure 1) and connected with a mirror galvanometer. When water is added to the sample, the ensuing increase of temperature is indicated by the galvanometer and then entered on a differential thermogram. When, through heat exchange, the temperature difference between the two cement samples is evened off, the thermogram gives a true picture of the development of hydration heat (Figure 2). This method was successfully used with clinkers of different mineralogical composition (Figure 3).

Card 1/2

PONOMAREV, I.F., prof.; AZELITSKAYA, R.D., kand.tekhn.nauk

Study of concretes made of cements containing alkali and
aggregates with active silica. Bet.i zhel.--bet. no.8:370-373

Ag '61.

(MIRA 14:8)

(Concrete)

BUDNIKOV, I. F.; ASHLITSKAYA, R. D.

Study of $3CaO \cdot 12H_2O$ hydration by the method of thermal analysis.
Ukr. Khim. Zhurn. No. 6:722-726 '61. (RUS. 14:11)

1. Mendeleevskiy khimiko-tekhnologicheskii institut im. D.I.
Mendeleeva i Novocherkasskiy politekhnicheskii institut.
(Calcium alborinate)
(Hydration)

AZELITSKAYA, N.D.

Interaction between active silica of the filler and alkali containing cements in the process of hydration of cement solutions. Trudy NPI 129:23-28 '62.

Petrographic method of control in the production of some binding agents. Ibid.:55-61 (MIRA 18:3)

CHERNYKH, V.F.; AZELITSKAYA, R.D.; PONOMAREV, I.F.

Clinker-forming compounds - water systems. Part 1: Effect of
alkalies and active silica on the hydration of calcium silicates.
Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.5:834-840 '63.

(MIRA 16:12)

1. Novocherkasskiy politekhnicheskii institut imeni S.Ordzhonikidze,
kafedra tekhnologii vyazhushchikh veshchestv.

CHERNYKH, V.F.; AZELITSKAYA, R.D.; PONOMAREV, I.F.; MANDRYKIN, Yu.I.

Effect of alkalies on the mineral-forming process and hydration of calcium silicates. Tsement 29 no.5:7-9 S-O '63.
(MIRA 16:11)

1. Novocherkasskiy politekhnicheskiy institut.

CHERNYKH, V.F.; PONOMAREV, I.F.; AZELITSKAYA, R.D.

Investigating the calcium silicate hydration process and the
effect on it of caustic potash. Trudy NPI 154:15-26 '63.

(MIRA 17:10)

CHERNYKH, V.F.; AZELITSKAYA, R.D.; PONOMAREV, I.F.

Systems clinker-forming compounds-water. Part 2: Influence of sodium and potassium oxides and active alumina on the hydration in the system $C_3A - C_4AF$. Izv.vys.ucheb.zav.; khim.i khim.tekh. 7 no.6:976-981 '64. (MIRA 18:5)

1. Novocherkasskiy politekhnicheskii institut imeni Ordzhonikidze, kafedra tekhnologii vyazhushchikh veshestv.

BUDNIKOV, P.P., akademik; AZELITSKAYA, R.D., kand.tekhn.nauk; PRIKHODCHENKO,
N.A., inzh.

Improvement in the structural properties of cement. TSement 30
no.6:5-7 N-D '64. (MIRA 18:1)

1. AN UkrSSR (for Budnikov).

BUDNIKOV, P.P.; AZELITSKAYA, R.D.

Effect of certain factors in the preparation of raw material
on the microstructure of cement clinkers. Zhur.prikl.khim. 37
no.7:1409-1414 J1 '64. (MIRA 18:4)

PRIKHODCHENKO, N.A.; AZELITSKAYA, R.D.; PONOMAREV, I.F.

Effect of electrolytes on the coagulation of a colloidal solution of
silicic acid. Koll. zhur. 27 no.5:745-748 3-0 '65. (MIRA 18:10)

1. Novocherkasskiy politekhnicheskiy institut, kafedra tekhnologii
vyazushchikh veshchestv.

AZELITSKIY, I.; DEVIATKIN, A.

Three generations; Grandh. av. 14 no.10:28-30 0 '57. (MIRA 10:12)
(Aeronautics., Commercial)

AZELOV, S.

Meeting of radio amateurs of Krasnoyarsk. Radio, No. 4, 1952.

SO: MLRA. June 1952.

AZEITSKAYA, A. E.

✓ The distribution of streptomycin in the organism following its parenteral administration. A. E. Azetskaya. *Trudy Akad. Med. Nauk S.S.S.R., Antimikrobn. i Kh. Primenenie* 1952, No. 1, 68-72 (1952).—Streptomycin appears earlier in the blood but remains longer in the lymph; 50-60% of the drug is eliminated by the kidneys during the first 12 hours. Only traces are found in the liver and none in the pancreas, although it is present to a certain amount in the kidneys and lungs. A. S. Mirkin

AZEN, R.S.

807/51-7-3-12/71
Asm, L.A.

AUTHORS:

TITLE:
Plastic Scintillators with Additions of Aryl Derivatives of
1,3,4-Oxadiazole.

PERIODICAL: Optika i spektroskopiya, 1980, Vol. 17, No. 3, pp 364-370 (1982)

ABSTRACT:
The authors measured the scintillation efficiency and recorded the
absorption and luminescence spectra of solid solutions of eight
2,5-aryl derivatives of oxadiazole in polystyrene. These derivatives

2,5-bis(phenyl)-1,3,4-oxadiazole (BD);
2,5-bis(4-methoxyphenyl)-1,3,4-oxadiazole (BMD);
2,5-bis(4-ethylphenyl)-1,3,4-oxadiazole (BED);
2,5-bis(4-propylphenyl)-1,3,4-oxadiazole (BPD);
2,5-bis(4-isopropylphenyl)-1,3,4-oxadiazole (BIPD);
2,5-bis(4-tert-butylphenyl)-1,3,4-oxadiazole (BTBD);
2,5-bis(4-nonylphenyl)-1,3,4-oxadiazole (BNBD);
2,5-bis(4-dodecylphenyl)-1,3,4-oxadiazole (BDD);
2,5-bis(4-octadecylphenyl)-1,3,4-oxadiazole (BOD).

The BD compound was obtained by heating of 4-biphenylhydrazide with
ethyl ester of α -formic acid (Ref. 2). The other seven compounds were

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prepared by copolymerization of the corresponding dihydrazides by heating
with phosphorus oxychloride (Ref. 3). All compounds were purified by
recrystallization and characterized by IR and 1H -NMR. The scintillators
were in the form of polystyrene discs (with the appropriate 1,3,4-oxadiazole
derivative added to them) of 20 mm diameter and 11 mm height; they were
prepared by high temperature polymerization in an atmosphere of nitrogen.
The absorption spectra were recorded by means of a spectrophotometer
SP-4. The luminescence spectra were obtained by means of the same
instrument used as monochromator; they were recorded photoelectrically.
The scintillation efficiency was determined from the current of a PMT-11
photo multiplier (a sample of liquid scintillator was used as
the source of scintillation; the absorption spectra of the eight
oxadiazoles are shown in Fig. 1 (curves 1-4) and 2 (curve 1-4)). The
luminescence spectrum of polystyrene is shown as curve 5 in both
figures. The greatest amount of overlapping of the absorption spectra
with the luminescence spectrum of polystyrene was exhibited by the
compounds with 1-nonyl radical, that is the compounds BPD, BIPD
and BMD. Figs 3 and 4 show the photoluminescence spectra (excited
with 253 and 313 m μ mercury lines). Zero again the oxadiazole with
1-nonyl radical show the greatest amount of overlap with the maximum
of the PMT-11 sensitivity. The dependence of the scintillation

Card 2/4

efficiency on the concentration of the oxadiazole (Fig. 7) show that
the compounds BPD, BIPD, BMD and BD are the most efficient. In a
table on p. 369 the authors list the absorption and luminescence
maxima (cols 3 and 4), the concentration oxadiazole in polystyrene
(col 5) and the scintillation efficiency (col 6) of the eight oxadiazole
derivatives listed above and eight other 1,3,4-oxadiazole derivatives
studied earlier. The authors found that the scintillation efficiency
of organic compounds in plastic is determined primarily by their
absorption and luminescence spectra and their luminescence yield. The
scintillation efficiency may be measured in relative units by Swank
factor, which takes into account the background and the scintillation
luminescence of the plastic. The authors also show the photoluminescence
spectrum of the additive (oxadiazole derivative) and the photoluminescence
yield of the additive and the efficiency of recording of the mixture
by the additive. The best scintillation property among the diaryl
derivatives of oxadiazole were found in the compounds with 1-nonyl
and biphenyl radicals. Among the sixteen compounds listed in the
table on p. 369 the following were found to be most efficient in

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plastic scintillators:

2,5-bis(4-biphenyl)-1,3,4-oxadiazole (BD);
2,5-bis(4-nonylphenyl)-1,3,4-oxadiazole (BNBD);
2,5-bis(4-tert-butylphenyl)-1,3,4-oxadiazole (BTBD);
2,5-bis(4-isopropylphenyl)-1,3,4-oxadiazole (BIPD);
2,5-bis(4-ethylphenyl)-1,3,4-oxadiazole (BED);
2,5-bis(4-propylphenyl)-1,3,4-oxadiazole (BPD);
2,5-bis(4-methoxyphenyl)-1,3,4-oxadiazole (BMD);
2,5-bis(4-dodecylphenyl)-1,3,4-oxadiazole (BDD).

There are 7 figures, 1 table and 2 references. 2 of them are tables.
1 table, 1 figure and 2 references in this section.

5 (3)

AUTHORS:

Grekov, A. P., Azen, R. S.

SOV/79-29-6-49/72

TITLE:

Synthesis of the Asymmetric 2,5-Diaryl Derivatives of
1,3,4-Oxadiazole (Polucheniye asimmetrichnykh 2,5-diaril-
proizvodnykh 1,3,4-oksadiazola)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol. 29, Nr 6,
pp 1995-1998 (USSR)

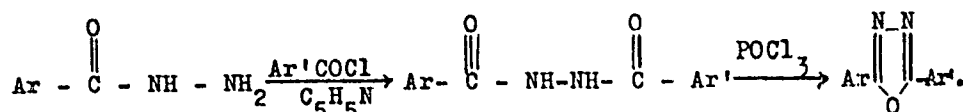
ABSTRACT:

The investigation of the tendency of a great number of various organic products towards scintillation led to the discovery of new promising compounds, among them also the oxadiazoles (Refs 1-3). In order to investigate the dependence of the structure on the scintillation activity in the series of the oxadiazole derivatives and to find new compounds very active in this respect, the authors synthesized the asymmetrical 2,5-diaryl substituted 1,3,4-oxadiazoles which have not yet been described in publications. The hydrazides corresponding to them were also new. The following scheme was used for the synthesis of these compounds:

Card 1/3

Synthesis of the Asymmetric 2,5-Diaryl Derivatives
of 1,3,4-Oxadiazole

SOV/79-29-6-49/72



In this scheme, two stages are of great interest from the preparative point of view, the formation of the asymmetric diaryl hydrazide and its closing to the oxadiazole ring. In the first stage the formation of the asymmetric hydrazide in pyridine may be complicated by the fact that besides the main product sometimes also the symmetric hydrazide is obtained. In the second stage a short heating of the corresponding diaryl hydrazide with POCl_3 only until its complete dissolution is sufficient for the formation of the oxydiazole ring. A further heating leads to a deterioration of the product. All hydrazides synthesized are colorless crystalline compounds. The following compounds were newly synthesized: 2-phenyl-5-(1-naphthyl), 2-(4-biphenyl)-5-(1-naphthyl-, 2-phenyl-5-(2-naphthyl)-, 2-(4-biphenyl)-5-(2-naphthyl)-, and 2-(1-naphthyl)-5-(2-naphthyl)-1,3,4-oxadiazole as well as

Card 2/3

Synthesis of the Asymmetric 2,5-Diaryl Derivatives
of 1,3,4-Oxadiazole

SOV/79-29-6-49/72

their hydrazides. There are 8 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov, Khar'kovskiy filial (Khar'kov Branch of the All-Union Scientific Research Institute of Chemical Reagents)

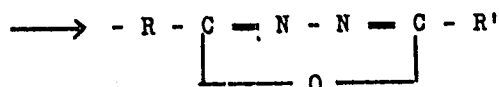
SUBMITTED: April 22, 1958

Card 3/3

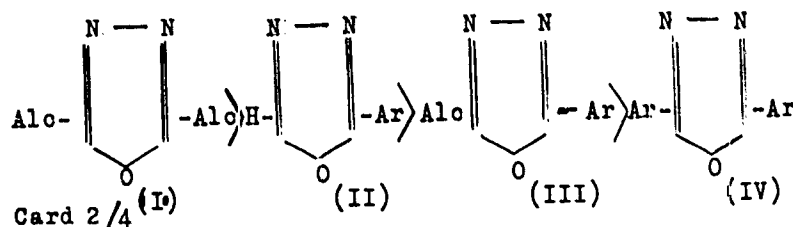
89509

S/079/61/001/002/002/019
B118/B208

Synthesis of new ...



(R and R' = methyl, phenyl, 1-naphthyl, 2-naphthyl, 4-biphenyl, 2-fluorenyl, 9-fluorenyl, 9-phenanthryl). Although this reaction scheme is well devised, the formation stage of oxadiazole and its separation from water are of considerable interest. The various oxadiazole derivatives are known to be of different solubility in water. The fact that the heterocyclic ring of oxadiazole derivatives is cleft under the action of aqueous acid and alkaline solutions to give the corresponding diaryl hydrazide (Refs. 9-12) induced the authors to study this problem thoroughly. It was found that oxadiazole derivatives were differently hydrolyzable. This capability is reduced according to the following scheme, similarly to the solubility in water (Refs. 7, 8):

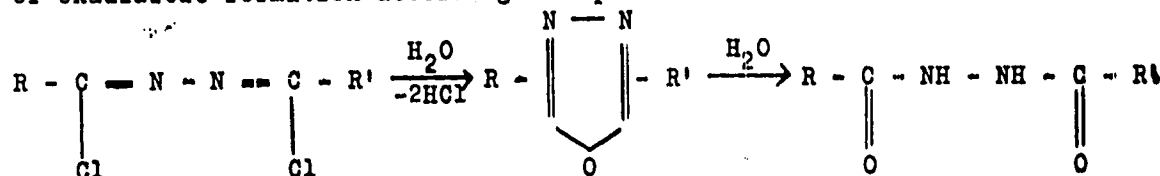


89509

S/079/61/031/002/002/019
B118/B208

Synthesis of new ...

Products (I) and (II) are quickly hydrolyzed, while the oxadiazole ring of compound (IV) is left only prolonged heating. 2, 5-dimethyl and 2-phenyl-1, 3, 4-oxadiazoles are decomposed in dilute mineral acids even at low temperatures and give the initial hydrazides, whereas 2-phenyl-5-(9-fluorenyl)-1, 3, 4-oxadiazole is very stable; 2-methyl-5-(9-fluorenyl)-1, 3, 4-oxadiazole takes an intermediate position. Two reactions take place at last stage of oxadiazole formation according to equation



The second reaction apparently proceeds more slowly, and is determined by the solubility of the oxadiazole. 23 novel 1, 2-diaryl hydrazines and 2, 5-diaryl-1, 3, 4-oxadiazoles were synthesized. The crystalline 2, 5-diaryl derivatives of 1, 3, 4-oxadiazole are thermostable, except for fluorene derivatives. There are 2 tables and 13 references: 8 Soviet-bloc and 2 non-

Card 3/4

89509

Synthesis of new ...

S/079/61/031/002/002/019
B118/B208

Soviet-bloc.

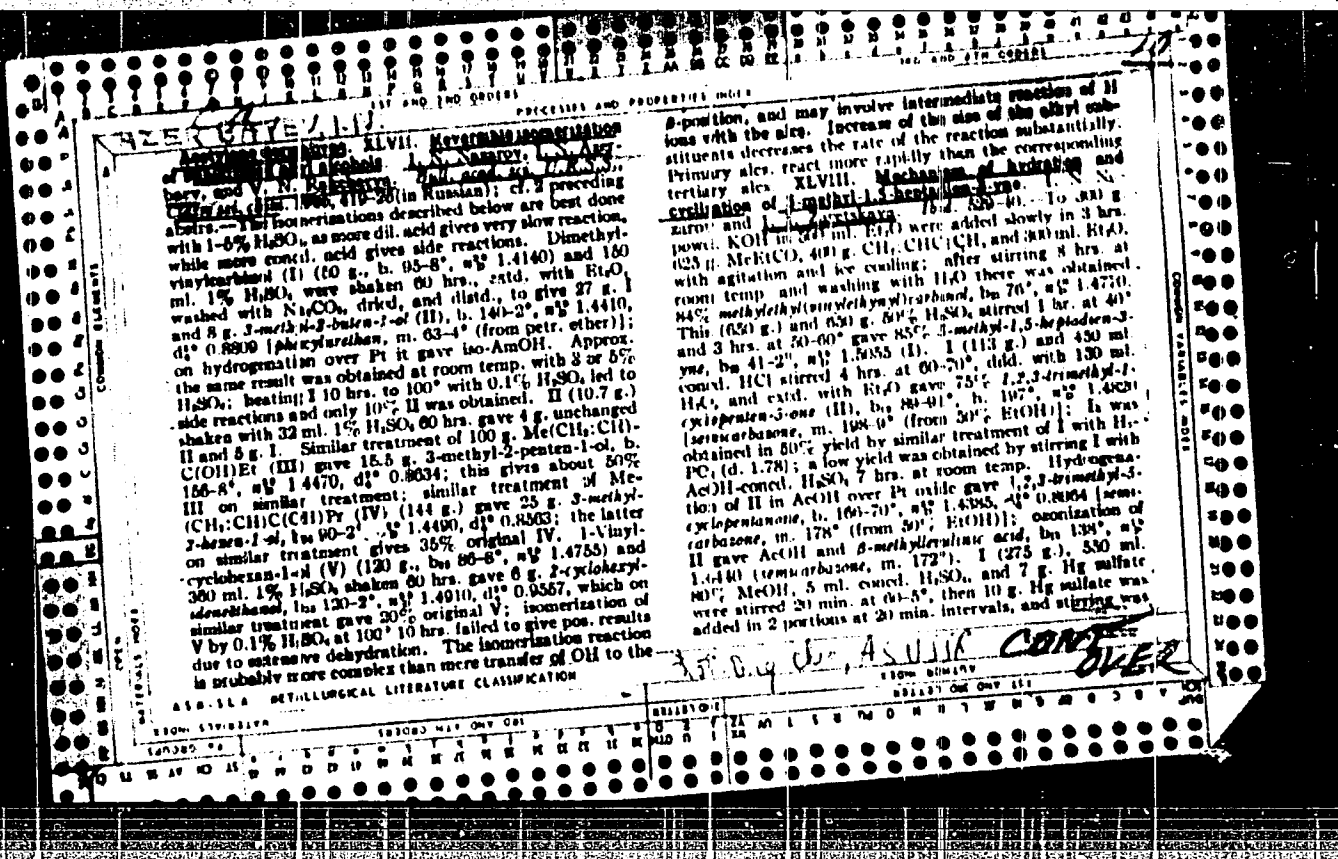
ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov, Khar'kovskiy filial (All-Union Scientific Research Institute of Chemical Reagents, Khar'kov Branch)

SUBMITTED: March 28, 1960

Card 4/4

GRESHKO, F. F.; AZEN, V. E.

Study of molecular interaction as applied to the analysis of hydrocarbon mixtures. Part 1: Diethylamides and tetraethylamides of some carboxylic and dicarboxylic acids as stationary phases. Zhur. ob. Khim. 34 no.6:1843-1848 Je '64. (MIRA 17:7)



10

Hydrogenation of 1-ethynylcyclohexanol and 1-ethynylcyclohexene. Synthesis of 1-vinylcyclohexene. I. N. Ansharov (Leningrad State Univ.). *J. Gen. Chem. (U.S.S.R.)* 11, 412-20 (1943) (English summary).—1. Ethynylcyclohexanol, (I), prepd. by the action of CaH_2 on cyclohexanone in the presence of powder KOH in H_2O at 0°, b. 176°, bp 73°, d_4^{20} 0.9740, n_D^{20} 1.4734, n_D^{25} 1.4624 (90%); 810% of bis(1-hydroxycyclohexyl)acetylene was also obtained, m. 102.3°. I was reduced electrolytically by using sheet Cu as cathode, a nichrome ribbon anode, a porous separator, and aq. NaOH for electrolyte in the anode compartment, while the cathode compartment contained 1 in 1% NaHCO_3 with a 1:8 concn. the c.d. used was 0.5-0.8 amp./sq. dm. (cathode) at 2.5-3 v.; yields of 85-90% were obtained with the product, 1-ethynylcyclohexanol, having d_4^{20} 0.9400, n_D^{20} 1.47200, n_D^{25} 1.46214, n_D^{30} 1.45805, d_4^{30} 0.9360; phenylacetylene, m. 88.5-9°; oxidation gave 1-(1-hydroxycyclohexyl)-1,2-ethanediol, m. 104.5°, while dehydration over MgSO_4 at 220-30° gave 40% and, by means of phthalic anhydride at 170°, 60% of 1-vinylcyclohexene, bp 67-8°, b. 142.3°, d_4^{20} 0.8690, d_4^{25} 0.8623, n_D^{20} 1.45541, n_D^{25} 1.45128, n_D^{30} 1.51023. The latter condensed with maleic anhydride at room temp. to form a bismaleic adduct, which was found in water, sol. in NaOH; its 4g solid was prepd. and analysed as $\text{C}_{16}\text{H}_{18}\text{O}_4$. 1,4-Naphthoquinone (2 g.) and 4 g. 1-vinylcyclohexene heated to 100° for 1 hr. gave 3,4-tetrahydronaphthalene-1,4-diol, m. 102.3°, which gave, on blowing with air in alc. NaOH, golden yellow 3,4-tetrahydronaphthalenequinone, m. 162.3° (from AcOH). Catalytic dehydration of I over MgSO_4 , as above, gave 1-ethynylcyclohexene (30%), b. 148.5°, d_4^{20} 0.9401, n_D^{20} 1.47073, n_D^{25} 1.46218, n_D^{30} 1.46001, which was catalytically hydrogenated in H_2O in the presence of Ni and $\text{PdCl}_2 \cdot 2\text{NaCl}$ to yield 1-vinylcyclohexene, identical with the above prepn. Heating of the vinyl compd. to 50-60° in a sealed tube gave a gelatinous polymer. G. M. K.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

13000 SYMBOL

13000 SYMBOL

13000 SYMBOL

13000 SYMBOL

AZERBAYEV, I. N.

USSR/Chemistry - Rearrangements, Allylic
Chemistry - Allyl Groups

Mar 1948

"Acetylene Derivatives. 62. Regrouping of the Allyl System. II. Isomerization of Dialkylene-Vinyl-Carbinols in Esterification Reactions. The Methyl Esters of γ -dialkylene-Allyl Alcohols," I. N. Nazarov, I. N. Azerbayev, V. N. Rakcheyeva, Inst Org Chem, Acad Sci USSR, 7 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 3

γ -dialkylallyl alcohols revert by isomerization to β -dialkylallyl alcohols when the former is in methanol solutions containing small amounts of sulfuric acid. There is a simultaneous esterification with a resultant formation of a methyl ether and γ -dialkylallyl alcohol mixture. Submitted 7 Apr 1947.

PA 69T77

AZERBAIJAN, I. N.

USSR/Chemistry - Rearrangements, Allylic
Chemistry - Allyl Groups

Mar 1948

"Acetylene Derivatives. 63. Reverse Regroupings of the Allyl System. III. Action of Hydrogen Chloride on the α,β and γ,δ -Dimethylallyl Carbinols and Isomeric Changes of α,β and γ,δ -Dimethylallyl Chlorides in Exchange Reactions," I. N. Nazarov, I. N. Azerbaev, Inst Org Chem, Acad Sci USSR, 10 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 3

Action of gaseous hydrogen chloride on dimethylvinyl-carbinol greatly facilitates reaction of transfer of hydroxyl to chlorine. Reaction of α,β and γ,δ -dimethylallylchloride and potassium acetate frequently causes a regrouping, with a resultant mixture of dimethylvinylcarbinol acetates and γ,δ -dimethylallyl alcohol. Submitted 7 Apr 1947.

PA 69778

AZERBAYEV, I. N.

USSR/Chemistry - Acetylene, Derivatives
Chemistry - Research - Acetylene, 1947-1948

Apr 48

"Acetylene Derivatives: No 64, Regrouping of the Allyl System," I. N. Nazarov, I. N. Azerbayev, V. M. Rakobeyeva, Inst Org Chem, Acad Sci USSR, 9 pp
"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

Studies action of gaseous hydrogen chloride on methylpropylvinylcarbonol and its isomer 3-methyl-3-propylvinylcarbonol. Gives quantitative estimate of isomeric chlorides formed. Shows primary chloride predominates. Studied some exchange reactions of the chlorides obtained. Submitted 7 Apr 1947

PA 8/49T99

SIBIRYAKOVA, N.Ya.; AZERBAYEV, I.N.

Low temperature oxidation of coal. Izv. AN Kazakh. SSR. Ser.khim.
no.1:105-111 '58. (MIRA 12:2)
(Coal) (Oxidation)

KHALTURIN, A.I.; AZERBAYEV, I.N.

Contribution to the theory of the spontaneous combustion of coal.
Izv. AN Kazakh. SSR. Ser.khim. no.1:112-120 '58.

(MIRA 12:2)

(Combustion)

KHALTURIN, A.I.; AZERBAYEV, I.N.

Spontaneous combustion of Maikubun'sky Basin coal. Trudy Inst.
khim.nauk AN Kazakh. SSR 2:197-209 '58. (MIRA 12:2)
(Combustion, Spontaneous)

KHALTURIN, A.I.; AZERBAYEV, I.N.

Method of determining active oxygen in coals. Izv.AN Kazakh.SSR.Ser.
khim. no.1:107-115 '59. (MIRA 13:6)
(Oxygen--Analysis) (Coal--Analysis)

KHALTURIN, A.I.; AZHIBAYEV, I.N.

Hydroquinone as an oxygen absorber in gas analyses. Izv.AN
Kazakh.SSR.Ser.khim. no.2:98-101 '59. (MIRA 12:8)
(Hydroquinone) (Gases--Analysis)

YAKUBOV, R.D.; AZERBAYEV, I.N.; ATAVIN, A.S.; TROFIMOV, B.A.; NAUMENKO, V.
Ye.

Hydration of acetylene by vinyl esters of ethylene and diethylene
glycols. Vest. AN Kazakh. SSR 19 no.7:21-31 J1 '63. (MIRA 17:2)

AZERBAYEV, I.N.; KOCHKIN, D.A., kand.tekhn.nauk

Achievements and prospects of the chemistry of tin organic and lead
organic compounds. Vest. AN Kazakh.SSR 19 no.10:18-26 0 '63.
(MIRA 17:1)

1. Ohlen-korrespondent AN KazSSR (for Azerbayev).

SOKOL'SKIY, D.V., akademik; AZERBAYEV, I.N.; KIRILIYUS, I.V.

Studying nickel catalysts by the magnetic induction method.
Vent. AN Kazakh. SSR 19 no.11:40-47 N'63. (MIRA 17:5)

1. Akademiya nauk Kazakhskoy SSR (for Sokol'skiy). 2. Chlen-
korrespondent AN Kazakhskoy SSR (for Azerbayev).

AZERBAYEV, I.N.; GUSEV, V.P., kand.khim.nauk; TATARCHUK, V.V.; SHEVEAN',
A.Ya.

Synthesis of propargylamines. Vest. AN Kazakh. SSR 20 no.4:60-62
Ap '64. (MIRA 17:9)

1. Chlen-korrespondent AN KazSSR (for Azerbayev).

SULTANOV, A.S.; AZERBAYEV, I.N.; SAFAYEV, A.S.; ARIFDZHANOV, A.

Production of ethyl formate on calcium phosphate. Vest. AN
Kazakh. SSR 20 no.8:24-32 Ag '64.

(MIRA 17:11)

AZARBAYEV, I.P.; MOISEVICH, T. L.

Isomerization of thioglycolic acid containing a tertiary carbon.
Chem. Vest. Ak. Nauk. SSSR, 1984, 18:18-19, 10 figs.
(Chem. 18:18)

AZERBAYEV, I.N.; KIRIIYUS, I.V.

Hydrogenation of diacetylenic alcohol, 2-methyl-2,5-hexadiyn-
2-ol. Izv. AN Kazakh, SSR. Ser. khim. nauk 14 no.1:84-90
Ja-Mr '64. (MIRA 18:3)

L 52782-65 EPF(c)/EWP(j)/EWA(c)/EWT(m) Pc-4/Pr-4 RPL EM/JH

ACCESSION NR: AP5015588

UR/0062/65/000/005/0846/0851

547.362

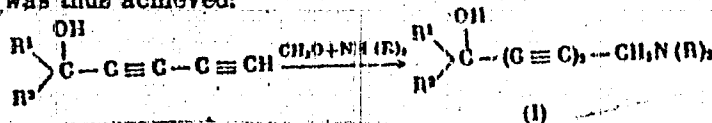
AUTHOR: Gus'kov, B.P.; Tatarchuk, V.V.; Azerbayev, L.N.; Kucherov, V.I.

TITLE: Chemistry of polyene and polyacetylene compounds. Report No. 13. Synthesis of dialkylamino derivatives of the diacetylene series

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1965, 846-851

TOPIC TAGS: polyunsaturated compound, amino alcohol, diamine, acetylene alcohol, diacetylene dialkylamino, Mannich reaction

ABSTRACT: Various types of dialkylamino derivatives of diacetylene were synthesized from diacetylenic alcohols by means of the Mannich reaction. A detailed study of the conditions of this reaction revealed that it can be carried out without masking the hydroxyl group by sufficiently diluting the reaction mixture with dioxane and using copper acetate as the catalyst. A one-step synthesis of diacetylenic amino alcohols of the general formula (I) was thus achieved:

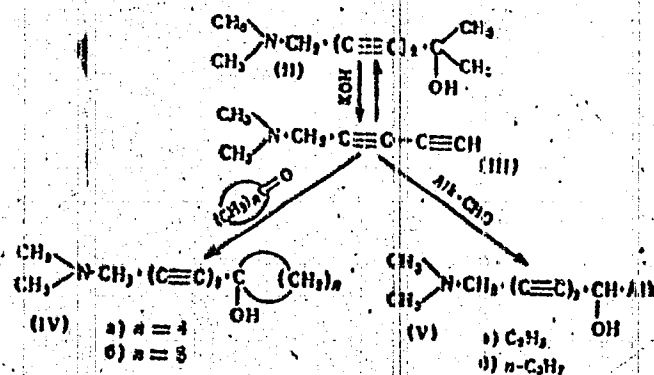


Card 1/3

L 57782-65

ACCESSION NR: AP5015588

Further reactions which produce tertiary and secondary diacetylenic amino alcohols were as follows:



Cont 2/3

L 57782-65

ACCESSION NR: AP5015588

In addition, it was shown that diacetylenic amines of the type of (III) readily enter into a Mannich reaction and are convenient starting materials for the synthesis of certain unsymmetrical diacetylenic diamines, which were also synthesized. The procedures employed are described in detail. Orig. art. has: 3 tables and 3 formulas.

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry, Academy of Sciences, USSR)

SUBMITTED: 21 Apr 63

ENCL: 00

SUB CODE: OC

NO REF SOV: 002

OTHER: 001

Card 3/3

SOKOL'SKIY, D.V.; AZERBAYAEV, I.N.; MATVEYCHUK, A.Ya.; KIRILYUS, I.V.

Effect of the additions of metals of the IV period on the
activity of alloyed nickel catalysts, Report No.1:
Hydrogenation of dimethylacetylenylcarbinol on a nickel
catalyst with chromium additions. Izv. AN Kazakh. SSR. Ser.
khim. nauk 15 no.1:58-63 Ja-Mr '65. (MIRA 18:12)

1. Submitted April 8, 1964.

POKOL'NITSY, D.V.; AZERBAIEV, I.N.; MITUSEVICHUK, A.Ya.; GETMANTSEVA, I.P.;
KIRILYUS, I.V.

Effect of the additions of metals of the IV period on the
activity of alloyed nickel catalysts. Report No.2: Hydrogenation
of nitrosonaphthols on a nickel catalyst with the addition of
vanadium. Izv. A N Kazakh. SSR. Ser. khim. nauk 15 no.1:64-69
Jan-Mar '65. (MIRA 18:12)

1. Submitted April 8, 1964.

SOKOL'SKIY, D.V.; AZERBAYEV, T.N.; MATVEYCHUK, A.Ya.; KIRILYUS, I.V.

Effect of metals of the IV period on the activity of alloyed
nickel catalysts. Report No.3: Nickel catalysts with additions
of titanium, vanadium, copper. Izv. AN Kazakh.SSR, Ser.khim.nauk
15 no.3:67-70 JI-Ag '65.
(M: RA 18:11)

1. Submitted April 8, 1964.

AZENBAYEV, I.N., akademik; MOLCHANOVA, T.Kh.; OMAROVA, R.G.

Thiocyanogen and chlorine derivatives of acetylene glycols.
Vest. AN Kazakh. SSR 21 no.12:44-48 D '65. (MIRA 18:12)

ACC NR: AP6032911

SOURCE CODE: UR/0360/66/000/003/0081/0084

AUTHOR: Azerbayev, I. N.; Sarbayev, T. G.; Makanov, U.

ORG: none

TITLE: Aryloxyacetic esters of acetylenic and diacetylenic alcohols

SOURCE: AN KazSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1966, 81-84

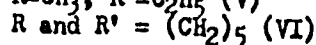
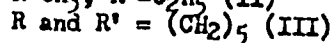
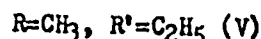
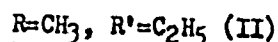
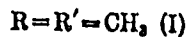
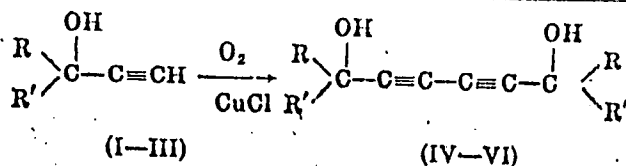
TOPIC TAGS: acetylene compound, pesticide

ABSTRACT: In order to find effective new wood killers and study the effect of acetylenic and diacetylenic groups on their biological activity, a series of aryloxyacetic esters of acetylenic and diacetylenic alcohols were prepared. Oxidative dimerization of carbinols (I-III) produced 2,7-dimethyl-3,5-octadiyne-2,7-diol (IV), 3,8-dimethyl-4,6-decadiyne-3,8-diol (V) and bis(1-hydroxycyclohexyl)-1,3-butadiyne (VI)

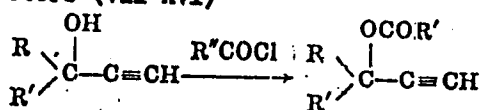
Card 1/3

UDC: 547.37:632.954

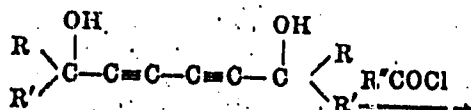
ACC NR: AP6032911



Esterification of these compounds with chlorides of phenoxyacetic, 2,4-dichlorophenoxyacetic and 2,4,5-trichlorophenoxyacetic acid in the presence of pyridine yielded the corresponding esters (VII-XVI)

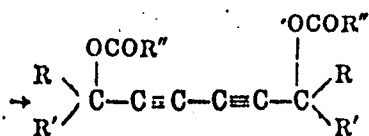


(VII, VIII)



Card 2/3

ACC NR: AP6032911



$\text{R}=\text{R}'=\text{CH}_3$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_5$ (IX)

$\text{R}=\text{R}'=\text{CH}_3$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}_2$ (X)

$\text{R}=\text{R}'=\text{CH}_3$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}$ (XI)

$\text{R}=\text{C}_2\text{H}_5$, $\text{R}'=\text{C}_2\text{H}_5$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_5$ (XII)

$\text{R}=\text{CH}_3$, $\text{R}'=\text{C}_2\text{H}_5$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}_2$ (XIII)

$\text{R}=\text{CH}_3$, $\text{R}'=\text{C}_2\text{H}_5$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}$ (XIV)

$\text{R}=\text{R}'=(\text{CH}_2)_6$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}_2$ (XV)

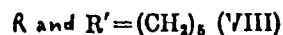
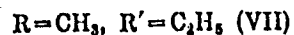
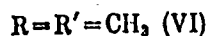
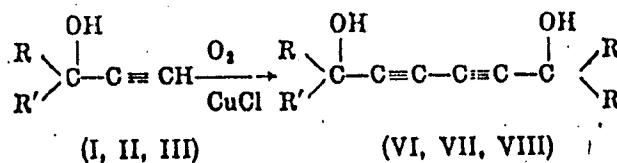
$\text{R}=\text{R}'=(\text{CH}_2)_6$, $\text{R}''=\text{CH}_2\text{OC}_6\text{H}_4\text{Cl}$ (XVI)

The physical constants are as follows: (VII), BP 145-146° at 3 mm, n_D^{20} 1.5380; (VIII), MP 145-146°; (IX), MP 33-34°; (X), MP 110-111°; (XI), MP 150-151°; (XII), MP 28-29°; (XIII), MP 95-96°; (XIV), MP 141-142°; (XV), MP 116-118°; (XVI), MP 116-118°; (XVI), MP 146-147°. The herbicide activity of the compounds is being tested.

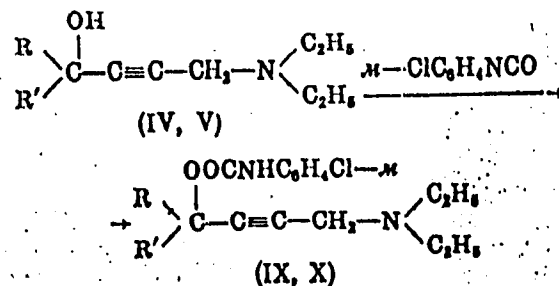
SUB CODE: 07/ SUBM DATE: 07May66/ ORIG REF: 006/ OTH REF: 001

Card 3/3

ACC NR: AP6032912



By reacting acetylenic amino carbinols (IV, V) and diacetylenic glycols (VI, VII, VIII) with m-chlorophenyl isocyanate in benzene or acetone solution with heating, diethylaminoalkyl (IX, X) and alkadiynyl (XI, XII, XIII) esters of N-m-chlorophenylcarbamic acid were obtained:



Card 2/3

ACC NR: AP6025397 SOURCE CODE: UR/0062/66/000/007/1209/1213

AUTHOR: Gusev, B. P.; Tatarchuk, V. V.; Azerbayev, I. N.; Kucherov, V. F.

ORG: Institute of Organic Chemistry, Academy of Sciences, SSSR (Institut organicheskoy khimii im. N. D. Zelinskiy Akademii nauk SSSR)

TITLE: Chemistry of polyene and polyacetylene compounds. XVIII. Amines of the diacetylene series

SOURCE: AN SSSR, Izv. Ser khim, no. 7, 1966, 1209-1213

TOPIC TAGS: amine synthesis, diacetylenic amine, dialkylaminoacetamino-diacetylene, ACETYLENE, AMINE, POLYMER CHEMISTRY

ABSTRACT:

Acetylenic amines are of interest because of their potential physiological activity. At room temperature in the presence of HCl and CaCl₂, tertiary diacetylenic alcohols (I) react with hydroquinone to form alkylchloro-diacetylenes (IIa, IIb, IIc, and IId). Reactions of the latter with sodium amide at room temperature yielded the primary amines of diacetylene series (IIIa, IIIb, IIIc, and IIId):

Card 1/4

UDC: 542.91+547.362

ACC NR: AP6025397

Table 1.

Formula	Yield, %	mp., °C (P ₁ mm Hg)	n _D ²⁰	ν, cm ⁻¹	Found, %				Calculated, %			
					C	H	Cl	N	C	H	Cl	N
$\begin{array}{c} \text{CH}_3 \\ \\ \text{R}'-\text{C}-\text{C}=\text{C}-\text{C}-\text{R}'' \\ \\ \text{Cl} \end{array} \quad \text{(II)}$												
a) R' = CH ₃ , R'' = H	91.1	27-30(6)	1.4926	2101, 2200	65.44	8.63	27.8	-	66.42	8.57	28.01	-
b) R' = C ₂ H ₅ , R'' = H	74.8	44-49(10)	1.5030		66.14	8.73	25.50	-	66.34	8.45	28.7	-
c) R' = CH ₃ , R'' = C ₂ H ₅	77.6	99-92(20)	1.5126		69.82	7.04	22.57	-	69.90	7.13	22.57	-
d) R' = C ₂ H ₅ , R'' = C ₂ H ₅	40	78-80(0.9)	1.5218		73.14	8.78	18.06	-	73.21	8.77	18.02	-
$\begin{array}{c} \text{CH}_3 \\ \\ \text{R}'-\text{C}-\text{C}=\text{C}-\text{C}-\text{R}'' \\ \\ \text{NH}_2 \end{array} \quad \text{(III)}$												
a) R' = CH ₃ , R'' = H	54.1	45-46(7)		2086, 2250	78.14	8.72	-	13.46	78.46	8.60	-	13.07
b) R' = C ₂ H ₅ , R'' = H	46.4	mp. 16-18	1.4964		79.01	9.24	-	11.39	79.29	9.15	-	11.54
c) R' = CH ₃ , R'' = C ₂ H ₅	41.8	52-53(7)	1.5148		79.8	9.51	-	10.28	79.95	9.69	-	10.36
d) R' = C ₂ H ₅ , R'' = C ₂ H ₅	40.9	76-76(7)	1.5148		81.16	10.68	-	7.94	81.30	10.80	-	7.90
		74-75(0.85)	1.5232	2136, 2232, 2248								

VIII, which was used in the Mannich reaction to obtain 1-dialkylamino-6-acetylamino-6-methyl-2, 4-heptadiynes, e.g., IXa. The reaction of IIa

Card 3/4

ACC NR: AP7011832

SOURCE CODE: UR/0360/66/000/004/0074/0078

AUTHOR: Azerbayev, I. N.; Sarbayev, T. G.; Gafurov, Ye. K.; Bazalitskaya, V. S.;
Poletayev, E. V.

ORG: none

TITLE: Dialkyl esters of alpha-phenoxyacetoxyalkenylphosphonic acids

SOURCE: AN KazSR. Izvestiya. Seriya khimicheskikh nauk, no. 4, 1966,
74-78

TOPIC TAGS: aldehyde, phosphonic acid, ester

SUB CODE: 07

ABSTRACT: The authors studied condensation of dimethyl-, diethyl-, dipropyl-
and dibutylphosphites with unsaturated aldehydes. Dialkyl esters of α -
phenoxyacetoxyallyl- and crotylphosphonic acids are synthesized.

Orig. art. has: 4 formulas. [JPRS: 40,351]

Card 1/1

UDC: 547.27/37:542.91
7027- 7428

AZ ERBAYEV, N.N.; MOLCHANOVA, T.K.

Efficient use of Central Kazakhstan coal. Vest. AN Kazakh. SSR 15
no. 4:43-46 '59. (Kazakhstan--Coal) (MIRA 12:7)

TSEFT, A.L., akademik; AZERBAYEVA, R.G., kand. tekhn. nauk; ADILOVA, A.A.

Behavior of selenides and tellurides of certain metals during
hydrochloric leaching. Vest. AN Kazakh. SSR 19 no.9:58-64 S '63.
(MIRA 16:11)

1. Akademiya nauk Kazakhskoy SSR (for TSeft).

AZERBAYEVA, R.G.; TSEFT, A.L.

Thermodynamic analysis of the solubility of certain selenides
and tellurides in a solution of ferric chloride. Trudy Inst.
met. i obog. AN Kazakh. SSR 8:50-56 '67 (MIRA 17:8)

Behavior of bismuth tellurides and selenides during saline
leaching. Ibid. 8:65-71

KAZHILAYEV, M.D., professor; AZHREBUKH, R.I., ordinator bol'nitsy

Isolated nonpenetrating injury of tongue with intralingual retention
of a foreign body for 40 years. Vest.oto-rin. 19 no.2:109-110
Mr-Apr '57.

(MLRA 10:6)

1. Iz kliniki bolezney ukha, gorla i nosa Azerbaydzhanskogo instituta
usovershenstvovaniya vrachev i Bakinskoy onkologicheskoy bol'nitsy.
(TONGUE, wds. & inj.

isolated blind inj. of tongue with intralingual
retention of foreign body for 40 years (Rus))

AZFRKOVICH, N.N.

Anorexia nervosa as one of the forms of pathological reactions
of puberal age. Probl. obshchei i sud. psikh. no.14:85-94 '63.
(MIRA 18:9)

AZERKOVICH, N.N. (Moskva)

Anorexia nervosa (mentalis); the development of the concept and the current status of the problem. Zhur.nevr.i psikh. 62 no.7:1105-1109 '62.

(ANOREXIA NERVOSA)

(MIRA 15:9)

AZENKOVICH, N.E.

Differential diagnosis of Filmonid's disease and anorexia nervosa.
Probl. endok. i gorm. 9 no.6:89-90, A-B 1961.

(MIRA 1:11)

1. Iz Moskovskoy gosudarstvennoy meditsinskoy i farmatsevticheskoy fakul'tety No.10
(glavnyy uch. I.A. Yekubovskiy).

AZERNIKOV, V.

Still unknown antibiotics. Nauka i zhizn' 28 no.1:61-64 Ja '61.
(Cancer research) (Antibiotics) (MIHA 14:1)

AZERNIKOV, V., inzh.

Impunity of viruses is, apparently, nearing its end. Nauka i
zhizn' 29 no.4:23-24, Ap '62. (MIRA 15:7)
(VIRUSES)

AZERNIKOV, V.

Machine synthesizes biological currents. IUn. tekhn. 4 no.9:34
S '59. (MIRA 12:12)
(Electrocardiography)

AZERNIKOV, V.

Search for petroleum in the sea. JUn.tekh. 4 no.3:30-32
Mr '60. (MIRA 13:6)
(Petroleum in submerged lands)

S/025/60/000/011/002/008
A166/A026AUTHOR: Azernikov, V., Engineer

TITLE: Great Expectations

PERIODICAL: Nauka i zhizn', 1960, No. 11, pp. 22 - 26

TEXT: The article deals with cenes, their properties and possible application. The Moskovskiy gosudarstvennyy universitet (Moscow State University) and the Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Elemento-Organic Compounds, AS USSR) have long been studying the polymerization of cenes, otherwise known as "sandwich" compounds. Chains with a molecular weight of up to 30,000 have successfully been developed. Three types of ferrocene polymer have been produced: 1) Where all the atoms of the hydrocarbon rings are inter-coupled with ethyl chains to give "strings of molecules". This gives a very flexible polymer. 2) Polymer of iron, aromatic hydrocarbon rings, silicon and oxygen, named polyferrocenosiloxanes. These are the only known liquid ferrocene polymers. They are resistant to high temperatures and may have practical use as thermostable lubricants or rosins for plastics. As lubricants they would have the added advantage of good adhesion to metal surfaces. 3) Polymers produced by

Card 1/2

AZERNIKOV, V., inzh.

Extraordinary gel. Nauka i zhizn' 27 no.9:44-46 S '60.
(Plastics) (Medical supplies) (MIRA 13:9)

AZERNIKOV, V., inzh.

Mystery of odors. Nauka i zhizn' 27 no.12:18-23 D '60.

(Odors)

(MIRA 13:12)

AZERNIKOV, Valentin Zakharovich; ANTONYUK, L., red.; KOVALEV, A., tekhn.
red.

[From matches to rocket fuel] Ot spichki - k raketnomu toplivu.
Moskva, Izd-vo TsK VLKSM "Molodaiia gvardiia," 1961. 142 p.

(Rockets(Aeronautics))--Fuel) (MIRA 14:8)

20384

S/025/61/000/002/001/003
A166/A033

9.4300 (1143, 1150, 1160)

AUTHOR: Azernikov, V., Engineer

TITLE: Semiconductor Polymers

PERIODICAL: Nauka i zhizn', 1961, No. 2, pp. 8-10

TEXT: The article explains the importance, utilization and active mechanism of semiconductor materials and points out the prospects for semiconductor polymers. Academicians A. V. Topchiyev and V. A. Kargin have conducted valuable research on the methods of imparting semiconductor properties to polymer materials. The Leningrad professor A. R. Regel' detected semiconductor properties in apparently non-crystalline fusions of solids. The name of Academician A. F. Ioffe is also mentioned. X

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S/025/61/000/004/003/003
A166/A133

AUTHOR: Azernikov, V., Engineer
TITLE: On an aircushion
PERIODICAL: Nauka i zhizn', no. 4, 1961, 65-67

TEXT: In 1961, a Leningrad plant will begin to work on an experimental aircushioned (hovercraft) vessel, designed by the Tsentral'noye konstruktorskoye tekhnologicheskoye byuro Ministerstva rechnogo transporta RSFSR (Central Technological Design Office of the RSFSR Ministry of Inland Water Transport). The vessel will be of the cupola type with an aircushion 8 cm thick. It will be 17 m long, 6.4 m wide and will weigh 3.5 tons, including 38 passengers and the fuel load. The vessel will be mounted on two 1-m wide floats to ensure buoyancy in case of a break-down of the fans generating the aircushion thrust. Vertical thrust is obtained via two fans mounted fore and aft, while horizontal thrust will be produced by an aircraft engine giving the vessel a speed of

Card 1/3

On an aircushion

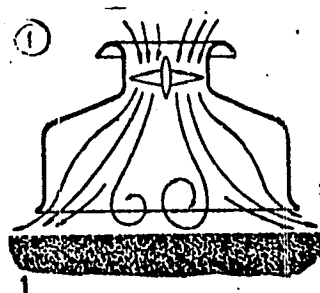
SI/025/61/000/004/003/003
A166/A133

55-60 km/h. The vessel is intended for transportation on small rivers and canals with shallow river beds, and may be followed by models suitable for transportation on major rivers, lakes etc., even may be developed to ocean-going and amphibian type vessels. There are 4 figures and 1 drawing on the insert left to page 65.

Legend to Figures 1-4:

Four different systems to produce the aircushion:

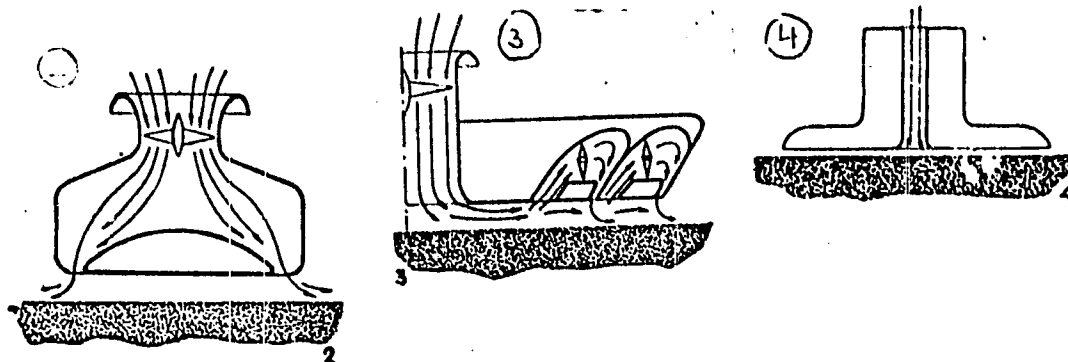
- (1) dome-shaped jet
- (2) ring-shaped jet
- (3) labyrinth compression
- (4) air lubrication principle



Card 2/3

On an aircushion

S/025/61/000/004/003/003
A166/A133



Card 3/3

AZERNIKOV, V., inzh.

On an air cushion. Nauka i zhizn' 28 no.4:65-66 Ap '61.
(MIRA 14:5)
(Ground effect machines) (Boatbuilding)

AZERNIKOV, V., inzh.

Generosity that must be won. Nauka i zhizn' 28 no.12:33-36
D '61. (MIRA 15:2)

(Phosphorus organic compounds)

S/025/62/000/001/002/004
D254/D302

AUTHOR: Azernikov, V., Engineer

TITLE: Nuclear solitaire

PERIODICAL: Nauka i zhizn', no. 1, 1962, 21-23

TEXT: The author describes a visit to the Director of the Institut yadernoy fiziki SO AN SSSR (Institute of Nuclear Physics, Siberian Branch of the AS USSR) and Corresponding Member of the AS USSR, A.M. Budker. He was told that the program of the Institute did not include the building of standard type reactors or the construction of conventional accelerators of the cyclotron, synchrotron and other types. The Institute will be engaged solely in developing new methods of particle acceleration, and new acceleration systems operated by these methods; the study of the physics of particles of high and superhigh energies at the Institute's installations; the creation of controlled thermonuclear reactions. Budker did not think that the solution of the problem of controlled thermonuclear synthesis would take as long as 25-50 years. In his opinion the problem may ✓

Card 1/2

S/025/62/000/001/002/004
D254/D302

Nuclear solitaire

be solved at any moment. As soon as energy becomes cheaper and its consumption increases an international agreement will be required to limit the output of each state, because the total output of energy on Earth must not exceed 20% of the energy obtained from the Sun, otherwise Earth would become overheated. The problems of adiabatic traps and systems of magnetic mirrors for confining plasma are being studied in Moscow at the Institut atomnoy energii imeni Kurchatova AN SSSR (Institute of Atomic Energy imeni Kurchatov of the AS USSR). In Siberia no direct research is carried out in this field. Some time ago, the Institute obtained a circulating relativistic electron current, about 200 times greater than that produced by the best betatron. Although this work was interrupted owing to the transfer of the Institute to Siberia, it is expected that the time lost would be regained. There are 3 figures.



Card 2/2

AZERNIKOV, V., inzh.

Technology of creativeness. Nauka i zhizn' 29 no.5:49-53 My
'62. (MIRA 15:11)

(Polymers)

AZERNIKOV, V.; ARLAZOROV, M.; ARSKIY, F.; EAKANGV, S.; BELOUSOV, I.;
BILENKIN, D.; VATEL', I.; VLADIMIROV, L.; GUSHCHEV, S.;
YELAGIN, V.; YERESHKO, F.; ZHURBINA, S.; KAZARNOVSKAYA, G.;
KALININ, Yu.; KELER, V.; KONOVALOV, B.; KREYNDLIN, Yu.;
LEBEDEV, L.; PODGORODNIKOV, M.; RAEGINOVICH, I.; REPIN, L.;
SMOLYAN, G.; TITARENKO, V.; TOPILINA, T.; FEDCHENKO, V.;
EYDEL'MAN, N.; EME, A.; NAUMOV, F.; YAKOVLEV, N.;
MIKHA'LOV, K., nauchn. red.; LIVANOV, A., red.

[Little stories about the great cosmos] Malen'kie rasskazy o
bol'shom Kosmose. Izd.2., Moskva, Molodaia gvardiia, 1964.
368 p. (MIRA 18:4)

L 62516-55

ACCESSION NR: AP5018420

VR/0025/65/000/006/0004/0005

AUTHOR: Azernikov, V. (Engineer)

20
3

TITLE: Soviet scientists succeeded in recombining the protein of bacteriophage

SOURCE: Nauka i zhizn', no. 6, 1965, 4-5, and inside front cover

TOPIC TAGS: bacteriophage, albumin, electron microscopy

ABSTRACT: The recombination of the protein coat of the tobacco mosaic virus is discussed. The structure of the recombined protein coat does not differ from the structure before recombination. B. Foglakov, candidate of biological sciences, was the first to obtain the recombination of one of the bacteriophage proteins. Electron microscopic investigations clearly show the protein which works like a spring, (similar to a muscle) and helps attack bacteria. This protein tail coat of bacteriophage was investigated. The dissociation under the effect of alkali and the recombination of protein are described and illustrated. Soviet scientists demonstrated the steric (in this case spiral) structure of the protein, laid in the protein molecules, and established that only protein in sufficient concentration is needed for the formation of the final structure. It was also demonstrated that, as in the protein of tobacco mosaic, the protein coat of bacteriophage can

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62535-65

ACCESSION NR: AP5021420

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be considered as a small crystal according to its properties. Crystalline bacteriophage protein was also obtained for the first time by Poglazov. This opened the way toward the x-ray analysis of the protein structure. On the basis of the first x-ray diagram, the clarification of the structure and composition of the bacteriophage protein is expected in the near future. Orig. art. has: 7 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

RC
Card 2/2

6

AZERNIKOV, Valentin Zakharovich; POZHIDAYEVA, M.G., red.

[The search is going on] Poisk v puti. Moskva, Sovetskaya Rossiya, 1965. 73 p. (MIRA 18:9)

AZERNIKOV, Valentin Zakharovich; LANINA, L.I., red.; RAKITIN, I.T.,
tekhn. red.

[Decoded code] Razgadannyi kod. Moskva, Izd-vo "Znanie,"
1963. 39 p. (Novoe v zhizni, nauke, tekhnike. X Seria:
Molodezhnaia, no.15) (MIRA 16:10)
(Proteins) (Chemical genetics)

AZERNIKOVA, O.A.

Variability of stocks of White Sea navaga. Okeanologia 5
no.5:894-896 '65. (MIRA 18:11)

1. Sevanskaya gidrobiologicheskaya stantsiya.

AZERSKAYA, M.L.

RYNO, S.I.; AZERSKAYA, M.L.

Alkalinity and magnetic susceptibility of pre-Cambrian layers
on White Russian territory. Vestsi AN ISSR no.3:128-134 My-Je
'52. (MIRA 7:8)

(White Russia--Geology, Stratigraphic) (Geology, Stratigraphic--
White Russia)

FALIN, L.I., prof.; AZERSKAYA, N.Ya., red.

[Histology of the nervous system; textbook] Gistclogia
nervnoi sistemy; uchebnoe posobie. Moskva, Mosk. med.
stomatologicheskii in-t, 1964. 51 p. (MIRA 18:6)

AZEV, S.I.

Distribution and specialization of stock farming in Akmolinsk
Province. Zhivotnovodstvo 21 no.9:16-21 S '59.
(MIRA 13:1)

1. Zaveduyushchiy otdelom ekonomiki Kazakhskogo nauchno-issledo-
vatel'skogo instituta zernovogo khozyaystva.
(Akmolinsk Province--Stock and stockbreeding)